

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,484	02/10/2004	John Santhoff	028CIP-119	· 1051
7.	590 11/15/2006	•	EXAMINER	
Pulse-Link, I		VO, DON NGUYEN		
Attention: Stev 1969 Kellogg A		ART UNIT	PAPER NUMBER	
Carlsbad, CA 92008			2611	
			DATE MAILED: 11/15/2006	

Please find below and/or attached an Office communication concerning this application or proceeding.

							
Office Action Summary		Applicat	ion No.	Applicant(s)	•		
		10/775,4	184	SANTHOFF ET A	AL.		
		Examine	er	Art Unit			
		DON N. V	· -	2611			
T	he MAILING DATE of this communic	cation appears on th	ie cover sheet wi	ith the correspondence a	ddress		
A SHOR' WHICHE - Extension after SIX (- If NO peric - Failure to Any reply	TENED STATUTORY PERIOD FOVER IS LONGER, FROM THE MASS of time may be available under the provisions of time may be available under the provisions of MONTHS from the mailing date of this community of for reply is specified above, the maximum state reply within the set or extended period for reply versely within the set or extended period for reply versely by the Office later than three months aftent term adjustment. See 37 CFR 1.704(b).	AILING DATE OF T of 37 CFR 1.136(a). In no e- unication. tutory period will apply and will, by statute, cause the ap	HIS COMMUNIC EVENT, however, may a re- will expire SIX (6) MON polication to become AB	CATION. eply be timely filed ITHS from the mailing date of this SANDONED (35 U.S.C. § 133)			
Status							
2a) <u> </u>	sponsive to communication(s) filed s action is FINAL . 2 ce this application is in condition fixed in accordance with the practic	b)⊠ This action is i or allowance excep	non-final. It for formal matte		e merits is		
Disposition	of Claims		•				
4a) 5)	of the above claim(s) is/are pending in the application of the above claim(s) is/are is/are im(s) is/are allowed. im(s) is/are rejected. im(s) is/are objected to. im(s) are subject to restrict. Papers specification is objected to by the drawing(s) filed on is/are: blicant may not request that any object olacement drawing sheet(s) including to oath or declaration is objected to	e withdrawn from continuous and/or election in Examiner. a) accepted or botton to the drawing(s) the correction is required.	requirement.)□ objected to libe held in abeyaned if the drawing(ce. See 37 CFR 1.85(a). (s) is objected to. See 37 C			
Priority unde	er 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 							
2)	References Cited (PTO-892) Draftsperson's Patent Drawing Review (PT n Disclosure Statement(s) (PTO/SB/08) s)/Mail Date	O-948)	Paper No(s	ummary (PTO-413))/Mail Date formal Patent Application			

Art Unit: 2611

DETAILED ACTION

Acknowledgment

1. This Office Action is responsive to the Amendment filed on 9/1/06.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
- 4. Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mowery, jr. (6,492,897; art of record) in view of Roberts (US 2004/0142663; newly cited art).

Regarding claims 1, 4-11, and 14-19, Mowery, as shown in figures 1-7,

Art Unit: 2611

teaches a system for coupling wireless signals to and from a power transmission line communication system comprising electric power wire (27), electric power outlet (28), ultra-wideband transmitter and receiver (24, 58). The coupling system of Mowery supports plurality of modulation techniques including UWB to communicate to and from the power line or power grid, which includes transformer (37), transmission substation (39), and distribution substation (38). through the interface (58) (bridge). See also column 6, lines 38 to column 17, line 7. However, Mowery fails to teach the carrier-free transmission for the term ultra-wideband (UWB) as now specified on pages 9 and 10 of the Amendment filed on 9/1/06. However, using carrier or carrier-free for UWB communications is well known in the art of UWB communications. See paragraphs [0006] and [0173] of Roberts. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Mowery for communicating the UWB pulse using carrier-free technique as taught by Roberts since it is just an alternative way of communicating the UWB signals.

Regarding claims 2, 3, 12, 13, 20, and 21, both Mowery and Roberts teaches all subject matter claimed except for specify the duration of the UWB pulse (claims 2, 12 and 20) and the power ranging (claims 3, 13 and 21) as claimed. However, to communicate the UWB pulse having the claimed duration and power is only a matter of selecting the operational parameters for a system's need and thus, would not involve any inventive features. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made

Art Unit: 2611

to modify the system of Mowery and Roberts for communicating the UWB pulse having the claimed duration and power as long as it is still in according with the UWB time domain based technology (column 11, lines 11-28) since it is just one of the range that the UWB signals can be communicated.

Response to Arguments

5. Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

- 6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. References Rofheart et al (6,909,877) and Boyden et al (7,092,693) are cited because they are pertinent to the UWB communication systems.
- 7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DON N. VO whose telephone number is (571) 272-3018. The examiner can normally be reached on MON FRI (9:00-6:30).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JAY PATEL can be reached on (571) 272-2988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/775,484

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DON N. VO

Primary Examiner Art Unit 2611

Page 5